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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,344	02/06/2004	Kengo Kurose	04329.3239	4489

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER
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BALAOING, ARIEL A

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,344

Applicant(s)

KUROSE ET AL.

Examiner

Ariel Balaoing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-11 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by MARSAN (US 6,188,904 B1).

Regarding claim 1, MARSAN discloses a mobile communication terminal for use in a cellular mobile communication system (abstract), comprising: a circuit configured to acquire a first neighbor list from the first base station serving the mobile communication terminal in a standby mode (column 2:lines 41-63), the first neighbor list storing data indicating first peripheral base stations existing near the first base station (column 2:lines 41-63); a memory configured to store the acquired first neighbor list (column 2:lines 41-63); a circuit configured to acquire, if the serving base station is changed in a standby mode from the first base station to a second base station, a second neighbor

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list from the second base station (column 2:lines 41-63; column 3:line 17-column 4:line 13), the second neighbor list storing data indicating second peripheral base stations existing near the second base station (column 2:lines 41-63; column 3:line 17-column 4:line 13); a measurement circuit configured to measure, when the second base station is serving the mobile communication terminal in a standby mode, communication quality between the mobile communication terminal and each of the second peripheral base stations listed in the acquired second neighbor list (column 3:line 17-column 4:line 13; column 4:line 34-column 5:line 3), and communication quality between the mobile communication terminal and each of the first peripheral base stations listed in the stored first neighbor list (column 3:line 17-column 4:line 13; column 4:line 34-column 5:line 3); and a circuit configured to select, as a hand-off destination candidate, one of the first peripheral base stations and the second peripheral base stations, which satisfies a preset condition, based on the measured communication quality (column 3:line 17-column 4:line 13; column 4:line 34-column 5:line 3).

Regarding claim 2, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. MARSAN further discloses wherein the memory stores the first neighbor list until a number of occasions in which selection for selecting the hand-off destination candidate is performed reaches a preset value (column 5:line 34-column 6:line 30).

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. MARSAN further discloses wherein the memory stores the first neighbor list for a preset time (column 5:line 66-column 6:line 67).

Regarding claim 12, MARSAN discloses a control unit incorporated in a mobile communication terminal for use in a cellular mobile communication system, the mobile communication terminal also incorporating a radio unit configured to transmit and receive radio signals to and from base stations, the radio unit being connected to the control unit (abstract), the control unit comprising: a first reception control section configured to make the radio unit to receive a first neighbor list from the first base station serving the mobile communication terminal in a standby mode, the first neighbor list storing data indicating first peripheral base stations existing near the first base station (2:lines 41-63); a memory configured to store the received first neighbor list (2:lines 41-63); a second reception control section configured to make the radio unit to receive, if the serving base station is changed in a standby mode from the first base station to a second base station, a second neighbor list from the second base station, the second neighbor list storing data indicating second peripheral base stations existing near the second base station (column 2:lines 41-63; column 3:line 17-column 4:line 13); a measurement control section configured to measure, when the second base station is serving the mobile communication terminal in a standby mode, communication quality between the mobile communication terminal and each of the second peripheral base stations listed in the acquired second neighbor list, and communication quality between the mobile communication terminal and each of the first peripheral base stations listed in the stored first neighbor list, measurement of the communication quality being performed based on the signals received by the radio unit (column 3:line 17-column 4:line 13; column 4:line 34-column 5:line 3); and a selection section configured to select,

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as a hand-off destination candidate, one of the first peripheral base stations and the second peripheral base stations, which satisfies a preset condition, based on the measured communication quality (column 3:line 17-column 4:line 13; column 4:line 34-column 5:line 3).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over MARSAN (US 6,188,904 B1) in view of SATARASINGHE (US 6,112,089).

Regarding claim 4, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. MARSAN further discloses wherein the measurement circuit measures reception quality from each of the first and second peripheral base stations (column 3:lines 58-column 4:line 12; column 5:line 34-65). However, MARSAN does not expressly disclose wherein the pilot signal reception quality is measured. SATARASINGHE discloses wherein the pilot signal reception quality is measured (column 2:lines 25-45). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify MARSAN to measure the pilot signal quality, as taught by SATARASINGHE, as increases capacity of the system.

Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. MARSAN further discloses wherein the measurement circuit measures the communication quality between the mobile communication terminal and each of the second peripheral base stations listed in the acquired second neighbor list, the measurement circuit also measuring the communication quality between the mobile communication terminal and those of the first peripheral base stations listed in the stored first neighbor list (column 3:lines 58-column 4:line 12; column 5:line 34-65). However, MARSAN does not expressly

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disclose wherein the neighbor list is obtained by excluding the first peripheral base stations doubly listed as the second peripheral base stations in the second neighbor list. SATARASINGE discloses wherein the neighbor list is obtained by excluding the first peripheral base stations doubly listed as the second peripheral base stations in the second neighbor list (Figures 2 and 3; column 3:lines 16-67).

***Allowable Subject Matter***

8. Claims 6-11, and 13 are allowed.
9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
10. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 6 and 13, the prior art of record fails to teach a second measurement circuit configured to measure the communication quality between the mobile communication terminal and each of the first peripheral base stations listed in the first neighbor list, if the second peripheral base stations do not satisfy the preset condition; and a second selection circuit configured to select, as the hand-off destination candidate, one of the first peripheral base stations, which satisfies the preset condition, based on the measured communication quality between the mobile communication terminal and each of the first peripheral base stations.

Regarding claims 7-11, these claims are allowed as being dependent upon independent claims that have been allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WILLEY (US 5,854,785) – Wireless communication device for soft handoff

CZAJA et al (US 2002/0037726 A1) – Forward link inter-generation soft handoff between 2G and 3G CDMA systems

TURCOTTE et al (US 5,666,650) – Split neighbor lists for multiple hyperband capable cellular systems

WALLSTEDT et al (US 5,854,981) – Adaptive Neighbor Cell List

LARRIBEAU et al (US 6,421,328 B1) – Neighborhood list assimilation for cell-based microsystem

WILLIAMSON et al (US 5,953,320) – Constructing a temporary list of neighboring base stations

OSTROFF et al (US 6,201,968 B1) – Combining entries from multiple neighbor cell lists to obtain an updated list

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-

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7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ariel Balaoing  
Art Unit 2683  
Patent Examiner

AB



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600